DOCUMENT RESUME

ED 242 597 SO 015 461

TITLE Curriculum Improvement Ongoing at West Windsor-Plainsboro High School.
INSTITUTION Northwest Regional Educational Lab., Portland, OR. Goal Based Education Program.
PUB DATE Nov 83
NOTE 6p.
PUB TYPE Reports - Descriptive (141) -- Journal Articles (080) -- Guides - Non-Classroom Use (055)
JOURNAL CIT Profiles, Programs and Products; n36 Nov 1983

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Career Awareness; Community Involvement; *Curriculum Development; *Curriculum Evaluation; Graduation Requirements; Guidance Programs; High Schools; *Nontraditional Education; School Community Relationship
IDENTIFIERS PF Project

ABSTRACT

West Windsor-Plainsboro High School (New Jersey) offers a tightly structured, diversified curriculum in a nontraditional open setting. The school curriculum focuses on teaching basic skills in reading, writing, science, math, and social studies; using a variety of instructional techniques; maintaining high faculty/administration commitment to curriculum improvement; and offering an extensive guidance program. Firm support from a young, professional community strengthens the program. The school's current objectives for curriculum improvement are to strengthen reading and writing skills and to establish schoolwide computer literacy by 1985. Action plans have been established for each objective. As part of ongoing curriculum improvement efforts, administrative teams identify areas of concern, then work with the principals and subject area teachers to accomplish established goals. A six-member guidance team assists students in meeting school graduation requirements. The guidance department features a strong career planning program. Varied teaching strategies in academic subjects include team taught courses, laboratory approach, and a variety of skill level courses from remedial to gifted. (LP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

✓ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M Margaret Rogers

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED242597

CURRICULUM IMPROVEMENT ONGOING AT WEST WINDSOR-PLAINSBORO HIGH SCHOOL

Profiles - Programs & Products
Number 36,, November 1983
Northwest Regional Educational Laboratory
300 S.W. Sixth Avenue
Portland, Oregon 97204

SO 015 461

Profiles
programs & products

Curriculum Improvement Ongoing at West Windsor-Plainsboro High School

West Windsor-Plainsboro High School in Princeton Junction, New Jersey, offers a tightly-structured, diversified curriculum in a nontraditional, open setting. Built in 1973, it is the single high school in a rapidly-growing district that is changing from a primarily rural to a suburban, research-oriented community. Students in the district progress from the two K-3 primary schools through the 4-6 elementary school and spend six years at West Windsor-Plainsboro High School in grades 7-12.

There are few traditional classrooms in the building, originally built to accommodate 1,340 students. Wings of flexible instructional space surround central commons areas, with students in grades 7 and 8 concentrated in one portion of the building and those in grades 9 through 12 in another. The school now serves 1,424 students. Due to overenrollment, space is at a premium in the building. Every space is used every period every day, and the theatre, hallways and open commons areas are often used for instructional purposes.

There are high parental expectations of students, and these expectations are reflected in the entire curriculum. Standards of excellence are also high, with emphasis on student achievement in language arts, social studies, mathematics, sciences and modern languages.

Student achievement scores on nationally-standardized tests have been high since the school opened. With continual schoolwide focus on improving curriculum and instruction, student test scores continue to climb. Because approximately 80 percent of students expect to continue their education at universities, colleges and community colleges, most students take the Scholastic Aptitude Tests. Although SAT scores nationally have declined in the past few years, scores at West Windsor-Plainsboro have increased significantly. In 1976, the combined verbal/math mean score on the SAT was 980, with 69 percent of seniors taking the test. In 1983, 77 percent took the test and the combined verbal/math mean score for West Windsor-Plainsboro seniors was 1036.

West Windsor-Plainsboro High School continues to make progress toward meeting the district educational goal of providing college- and noncollege-bound students with adequate preparation for entering the fields of their choice. A number of factors contribute to the school's focus on excellence:

- A diversified, flexible curriculum focused on basic skills instruction in reading, writing, mathematics, science and social studies
- Use of a variety of instructional techniques, tailored to student needs and subject area requirements
- High faculty and administrative concentration on continued curriculum improvement
- Community interest in and support of school programs
- An extensive guidance program for all students

Goals for Curriculum Improvement

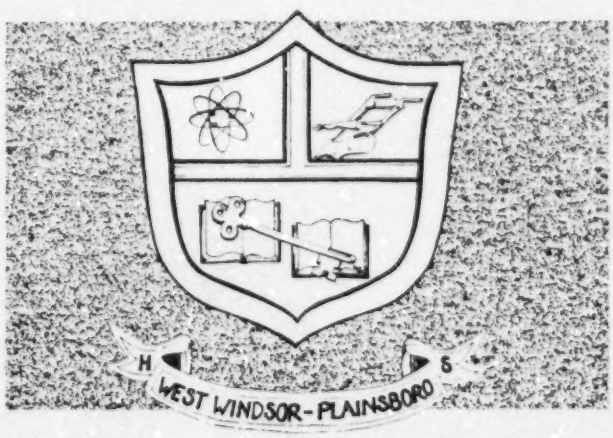
In the state of New Jersey, local school districts are required to set annual objectives based on community needs and board direction. Schools, in turn, set annual objectives reflecting those at the district level. Current objectives at West Windsor-Plainsboro focus on improvement in student reading and writing skills and on establishing schoolwide student computer literacy:

A. • By June of 1985, all students enrolled in grades 9 through 12 will demonstrate improved writing skills as measured by holistically scored and primary-trait assessed writing samples responding to appropriate grade level assignments.

• By June of 1985, all students enrolled in grades 9 through 12, given an assignment on grade level, will proof-read, edit and revise a piece of writing to demonstrate knowledge of logical organization of ideas.

• By June of 1985, all students enrolled in grades 9 through 12, given a writing sample on grade level, will recognize and correct common mechanical errors.

B. • By June of 1985, students in grades 7 through 12, given appropriate passages to read on grade level, will demonstrate improved skills in reading for different purposes by:



Innovative programs and ongoing curriculum improvement characterize West Windsor-Plainsboro High School.

Northwest Regional Educational Laboratory
300 S.W. Sixth Avenue
Portland, Oregon 97204

Goal Based Education
Number 36 November 1983

a. Varying reading speed and methods;
b. Identifying and comprehending main and subordinate ideas in a written work;
c. Interpreting a writer's meaning inferentially as well as literally;
d. Summarizing ideas in own words; and
e. Separating personal opinions and assumptions from the writer's.

C. • By June, 1984, all students in grades 7 and 8 will demonstrate computer literacy by:

a. Using a computer to solve assigned problems;
b. Developing appropriate computer programs in the LOGO language;
c. Listing how computers are used in society.

To facilitate implementation, a schoolwide "Action Plan" has been drawn for each objective. Plans include tasks and activities, personnel, resources, constraints, timelines, evaluation and personnel responsibilities. For the computer literacy objective, for example, a specific implementation plan was completed during the 1982-83 school year including the creation of a new computer curriculum for grades 7 and 8, expanding the high school program to include the lower grades. This year seventh and eighth grade mathematics classes include computer literacy activities, teachers have received inservice programs to become familiar with computer applications in the classroom, and teachers evaluate student progress. Results of the program, based on summary and analysis of student progress surveys, will then be presented to the Board of Education in the spring of 1984.

A similar action plan for the reading/writing objectives includes projected intensive work to integrate student acquisition of these skills in all phases of the curriculum. Language arts classes will continue to concentrate on reading and writing, while teachers in science, math and all other subjects will be trained in ways to recognize and support reading and writing skill development. Again, measurement and evaluation will take place to assess the impact of the plan in terms of student progress, and reports will be presented to the Board.

Administrative Team, Teachers Focus on Curriculum

At West Windsor-Plainsboro, an Administrative Team works with the principal to meet curriculum and instruction improvement goals. Under the direction of the principal, the team identifies areas for improvement and works extensively with teachers to continually upgrade the school curriculum. Team members include the two assistant principals (7-8, 9-12) and five supervisors, each of whom is responsible for several subject areas. These curriculum specialists serve as administrative supervisors, with tasks as varied as teacher evaluation, student discipline, inservice coordination and curriculum development. Assistant Principals concentrate on administrative procedures for operating the school.

Working with subject area teachers, Administrative Team members have supervised the development of curriculum guides for sequences of courses which cover all subjects offered in the school. For each course, general course descriptions, course resources/textbooks, expectations for students, measurable proficiencies and student responsibilities have been identified. Depending on the department, guides also include daily schedules of lessons, specific lesson plans and tests used to measure student progress. Students in all classes receive one-page descriptions of course guidelines.

All courses are broken into units of instruction of varying length. Some units are three weeks long. Others may be as long as 17 weeks and overlap the nine-week "marking period" when grades are reported. In these cases, teachers assess appropriate progress of students at the given point in the unit and assign grades. Continuous progress instruction is thus applied at the course level rather than at the individual student level.

Guides are placed in notebooks and used by all staff who teach a particular course. Teachers revise guides as they proceed through them during the year, making notations about successful use of materials or instructional techniques, suggested changes in course organization or other elements of the guide. During the summer, selected teachers meet with supervisors to review and update curriculum guides, which are then formalized for the beginning of the next cycle of use the following year. Curriculum guides are working tools at West Windsor-Plainsboro High and provide clear guidance for experienced teachers, new teachers and substitutes in the presentation of specific course content.

Guidance Program Aids Students in Meeting Requirements

In order to graduate from West Windsor-Plainsboro, all students must complete four years of Language Arts, two years of Social Studies (American History), two years of Mathematics, one year of Science, one year of The Arts (Art, Business Education, Home Economics, Industrial Arts, language arts electives, Music), one-half year of Career Development and a Physical Education course each year. Each student is required to complete successfully 107.5 credits, earning five credits for each course that meets daily for one class period during the entire school year. Courses meeting for a portion of the year are prorated. Students must also pass state examinations in reading, writing and computation before receiving a diploma. These tests are administered to students in grade 9 and repeated until students meet minimum standards.

The school has a daily schedule of seven class periods. In general, each student schedule includes six classes, although students in grades 9-12 are permitted to have one "no-class" period during which they may study in quiet, supervised areas in the school building. All students in grades 7 and 8 take a full schedule of classes, and 87 percent of students in grades 9-12 also opt for full class days rather than choose the "no-class" period. Most students complete more than the required number of courses and credits before graduation.

To identify proper placement of students in courses in the curriculum, regular testing takes place using both standardized and staff-developed tests. Students entering West Windsor-Plainsboro, for example, are tested at the end of grade 6 through both the California Achievement Tests and the school-developed math and language arts tests, both based on grade 7 objectives. Departmental teacher-made tests continue to monitor individual student progress through sequenced courses, and students may be moved from one level of course work to another at any time during the year according to ability, skill and performance. Remedial courses are scheduled in language arts and mathematics.

A six-member guidance staff assists students in selecting course work appropriate to student aspirations and needs. A career planning program informs students about vocational opportunities as well as recommended high school courses and academic requirements for college entrance. Students may choose to pursue vocational areas at two county vocational schools nearby (the school serves students in two New Jersey counties), or may enroll in two cooperative programs in office or industrial education which feature on-the-job work experience while the student fulfills high school graduation requirements. Guidance also includes an innovative peer counseling program where students share insights and concerns under the tutelage of trained staff.

SCHOLASTIC APTITUDE TEST SCORES
WEST WINDSOR — PLAINSBORO HIGH SCHOOL

FIGURE 1. Adjusted Mean

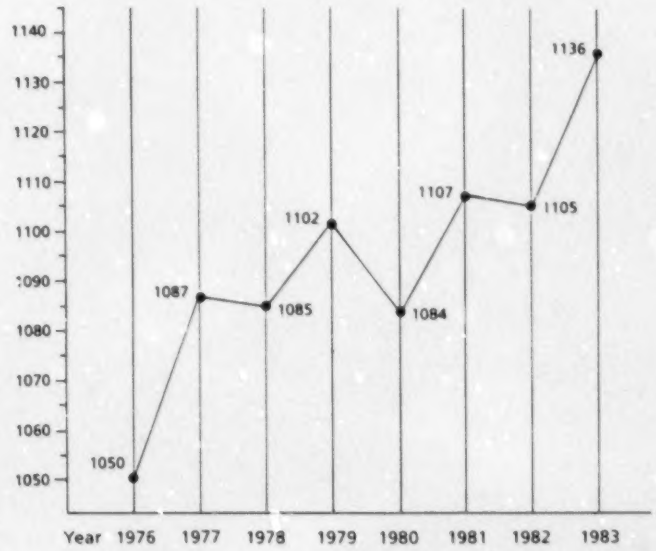


FIGURE 2. Combined Verbal/ Math Mean Score

Year	Percent Tested	Actual Mean	Adjusted Mean
1976	69%	980	1050
1977	76%	991	1087
1978	74%	996	1085
1979	69%	1032	1102
1980	72%	1003	1084
1981	79%	1000	1107
1982	77%	1005	1105
1983	77%	1036	1136

Scholastic Aptitude Test scores continue to rise at West Windsor-Plainsboro High School. The scores in *Figure 1.* have been adjusted to compensate for the differences in the percentage of students tested each year. For each additional percentile of students over 50 percent, 3.7 points were added to the mean SAT score for that year's group of students. The adjustment figure is based on analysis of SAT scores nationwide. Actual mean scores are noted in *Figure 2*.

Language Arts/Social Studies, Math, Science and Modern Languages Emphasized

While the school offers a varied curriculum, four academic subject areas are emphasized: an interdisciplinary language arts/social studies program, mathematics, science and modern languages. These areas are the focus for much of the school's innovative instructional programming.

Students are required to complete four years of language arts and two years of social studies. An interdisciplinary language arts/social studies program is required for all students in grades 7, 8 and 10. In two-period blocks of time, five-member interdisciplinary teams of teachers provide instruction in both subjects to all students. Grouping for instruction varies according to curriculum unit. In units of instruction where skill development is emphasized, students are divided into small groups according to ability level. In units emphasizing content, students and teachers meet in large group sessions.

While instruction is not entirely individualized, the team approach provides sufficient flexibility to provide instruction to students that is appropriate to individual performance level. Team planning time is scheduled daily, and teachers work together to refine course offerings. The remainder of the language arts/social studies requirements are met through student selection from among a number of courses taught in each area by individual teachers.

In the mathematics program, the team teaching approach is not used. Students proceed through sequences of courses designed to provide continual skill development. A variety of courses are available at four levels, from those for remedial through gifted students, designed to meet all student needs. One special three-year sequence in algebra and geometry reduces the pace of instruction so that students who complete the three years cover the same material as students concentrating on mathematics do in two years. Advanced placement courses include calculus and computer science. Students at all levels have opportunities for extracurricular activities including local, state and national mathematics and computer science leagues.

Science program courses emphasize a laboratory approach and are primarily taught by individual teachers. The required eighth grade science course, however, combines an interdisciplinary and traditional single-teacher approach. The curriculum for the course includes units in earth sciences, chemistry and biology, areas which often are single course offerings at the high school level. The course is planned and taught by a team of three teachers. Each teacher presents materials in one area, and students rotate through each teacher's unit to cover all three areas in order to complete the course. The science department also provides additional opportunities for advanced students in all courses. The curriculum guide includes special "excursion" units for further student exploration. These units, supervised by teachers, offer enrichment activities but are not designed as accelerated course work.

High Expectations for Excellence

There is a high concentration of well-educated, young professional families in the district, and the community is highly science/mathematics oriented. Parents have high expectations of their children, and expect them to be challenged and successful at West Windsor-Plainsboro High School. Parents are involved and interested in the school, which has organized numerous parent advisory committees focused on student activities. The school also publishes a parent newsletter four times each school year.

West Windsor-Plainsboro High is characterized by high expectations for both students and teachers. There are few student discipline problems, and attendance requirements are very strict. Students know they are at the school to learn and are expected to follow specified behavioral rules.

Students are intent on high achievement, whether in academic courses or in co-curricular activities. While test scores indicate that student academic achievement is high, there is ample evidence of other student excellence. The student chorus has won national awards, the band and orchestra have earned many awards, athletic teams are enthusiastically supported and student teams have been winners in interscholastic mathematics contests. Other student co-curricular programs include newspaper, yearbook, literary magazine, forensics, model United Nations, model Congress, drama and operation of a 10-watt FM radio station.

There are high expectations for teachers, as well. In regular observations, supervisors monitor teacher progress toward yearly improvement objectives. Objectives are set in discussions with supervisors after teacher observations at the beginning of the school year. Supervisors are supportive of teachers, and work closely with them to assist in improving curriculum, provide resources and arrange inservice sessions that will help teachers improve instructional methods and techniques.

Supervisors, in turn, are monitored and evaluated by the principal. General teacher performance, departmental progress in implementing action plans and schoolwide implementation of district goals are all considered.

Within the open environment at West Windsor-Plainsboro High School, a tightly-structured curriculum and a goal based approach keep students and staff focused on excellence. District goals, course curriculum guides and individual teacher objectives provide a framework within which all students at the school have the opportunity to achieve according to ability and need.

For more information, contact:

Ronald G. Watson, Principal
West Windsor-Plainsboro High School
346 Clarksville Road
Princeton Junction, New Jersey 08550
609/799-3200